

Union Calendar No. 266

103D CONGRESS  
2D SESSION

**H. R. 3254**

[Report No. 103-475]

**A BILL**

To authorize appropriations for the National  
Science Foundation, and for other purposes.

APRIL 13, 1994

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

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## IN THE HOUSE OF REPRESENTATIVES

OCTOBER 12, 1993

Mr. BOUCHER (for himself and Mr. BROWN of California) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

APRIL 13, 1994

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[For text of introduced bill, see copy of bill as introduced on October 12, 1993]

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## A BILL

To authorize appropriations for the National Science Foundation, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

3       **SECTION 1. SHORT TITLE.**

4       *This Act may be cited as the “National Science Foun-*  
5       *dation Authorization Act of 1994”.*

1 **SEC. 2. DEFINITIONS.**

2 *For purposes of this Act—*

3 *(1) the term “debt-for-science exchange” means*  
4 *an agreement whereby a portion of a nation’s com-*  
5 *mercial external debt burden is exchanged by the*  
6 *holder for a contribution of local currencies or other*  
7 *assets to support scientific and technological research;*

8 *(2) the term “Director” means the Director of the*  
9 *Foundation;*

10 *(3) the term “Foundation” means the National*  
11 *Science Foundation;*

12 *(4) the term “institution of higher education”*  
13 *has the meaning given such term in section 1201(a)*  
14 *of the Higher Education Act of 1965;*

15 *(5) the term “national research facility” means*  
16 *a research facility funded by the Foundation which is*  
17 *available, subject to appropriate policies allocating*  
18 *access, for use by all scientists and engineers affiliated*  
19 *with research institutions located in the United*  
20 *States;*

21 *(6) the term “science-technology center” has the*  
22 *meaning given such term in section 231(f) of the Ex-*  
23 *cellence in Mathematics, Science, and Engineering*  
24 *Education Act of 1990, and shall include both newly*  
25 *organized and established science-technology centers;*  
26 *and*

1           (7) the term “United States” means the several  
 2       States, the District of Columbia, the Commonwealth  
 3       of Puerto Rico, the Virgin Islands, Guam, American  
 4       Samoa, the Commonwealth of the Northern Mariana  
 5       Islands, and any other territory or possession of the  
 6       United States.

7       ***TITLE I—NATIONAL SCIENCE***  
 8       ***FOUNDATION AUTHORIZATION***

9       ***SEC. 101. AUTHORIZATION OF APPROPRIATIONS.***

10       (a) *FINDING.*—Congress finds that the programs of the  
 11       Foundation are important for the Nation to strengthen  
 12       basic research and develop human resources in science and  
 13       engineering, and that those programs should be funded at  
 14       an adequate level.

15       (b) *FISCAL YEAR 1995.*—(1) There are authorized to  
 16       be appropriated to the Foundation \$3,200,000,000 for fiscal  
 17       year 1995, which shall be available for the following cat-  
 18       egories:

19               (A) *Research and Related Activities,*  
 20               \$2,275,500,000, which shall be available for the fol-  
 21               lowing subcategories:

22                       (i) *Biological Sciences, \$301,800,000.*

23                       (ii) *Computer and Information Science and*  
 24                       *Engineering, \$262,200,000.*

1           (iii) *Engineering, \$313,400,000, of which*  
2           *\$2,000,000 shall be expended for primary mate-*  
3           *rials processing research.*

4           (iv) *Geosciences, \$425,000,000.*

5           (v) *Mathematical and Physical Sciences,*  
6           *\$641,200,000.*

7           (vi) *Social, Behavioral, and Economic*  
8           *Sciences, \$106,500,000.*

9           (vii) *United States Polar Research Pro-*  
10          *grams, \$160,800,000.*

11          (viii) *United States Antarctic Logistical*  
12          *Activities, \$62,600,000.*

13          (ix) *Critical Technologies Institute,*  
14          *\$2,000,000.*

15          (B) *Education and Human Resources,*  
16          *\$569,600,000.*

17          (C) *Academic Research Facilities Modernization*  
18          *Program, \$150,000,000.*

19          (D) *Major Research Equipment, \$70,000,000.*

20          (E) *Salaries and Expenses, \$125,500,000.*

21          (F) *Office of Inspector General, \$4,200,000.*

22          (G) *Headquarters Relocation, \$5,200,000.*

23          (2) *Of the amounts authorized under paragraph (1)(A)*  
24          *and (B)—*

1           (A) \$35,000,000 are authorized for activities au-  
2           thorized by the Scientific and Advanced-Technology  
3           Act of 1992;

4           (B) \$30,000,000 are authorized for activities au-  
5           thorized by section 305 of the High-Performance Com-  
6           puting Act of 1991;

7           (C) \$45,000,000 are authorized for activities au-  
8           thorized by section 307 of the High-Performance Com-  
9           puting Act of 1991; and

10          (D) \$16,000,000 are authorized for activities au-  
11          thorized by section 309 of the High-Performance Com-  
12          puting Act of 1991.

13          (c) *FISCAL YEAR 1996.*—(1) There are authorized to  
14          be appropriated to the Foundation \$3,392,000,000 for fiscal  
15          year 1996, which shall be available for the following cat-  
16          egories:

17               (A) *Research and Related Activities,*  
18               \$2,397,500,000, which shall be available for the fol-  
19               lowing subcategories:

20                       (i) *Biological Sciences, \$316,800,000.*

21                       (ii) *Computer and Information Science and*  
22                       *Engineering, \$285,000,000.*

23                       (iii) *Engineering, \$338,000,000, of which*  
24                       *\$2,500,000 shall be expended for primary mate-*  
25                       *rials processing research.*

1                   (iv) *Geosciences, \$444,000,000.*

2                   (v) *Mathematical and Physical Sciences,*  
3                   *\$668,800,000.*

4                   (vi) *Social, Behavioral, and Economic*  
5                   *Sciences, \$116,100,000.*

6                   (vii) *United States Polar Research Pro-*  
7                   *grams, \$164,800,000.*

8                   (viii) *United States Antarctic Logistical*  
9                   *Activities, \$64,000,000.*

10                  (B) *Education and Human Resources,*  
11                  *\$586,000,000.*

12                  (C) *Academic Research Facilities Modernization*  
13                  *Program, \$200,000,000.*

14                  (D) *Major Research Equipment, \$67,000,000.*

15                  (E) *Salaries and Expenses, \$132,000,000.*

16                  (F) *Office of Inspector General, \$4,300,000.*

17                  (G) *Headquarters Relocation, \$5,200,000.*

18                  (2) *Of the amounts authorized under paragraph (1)(A)*  
19                  *and (B)—*

20                   (A) *\$35,000,000 are authorized for activities au-*  
21                   *thorized by the Scientific Advanced-Technology Act of*  
22                   *1992;*

23                   (B) *\$50,000,000 are authorized for activities au-*  
24                   *thorized by section 305 of the High-Performance Com-*  
25                   *puting Act of 1991;*

1           (C) \$60,000,000 are authorized for activities au-  
2           thorized by section 307 of the High-Performance Com-  
3           puting Act of 1991; and

4           (D) \$22,000,000 are authorized for activities au-  
5           thorized by section 309 of the High-Performance Com-  
6           puting Act of 1991.

7           (3) No funds shall be expended for fiscal year 1996  
8           for the Critical Technologies Institute.

9           (d) *MEETING FUNDING GOALS.*—In allocating funds  
10          authorized under subsections (b)(1)(A) and (c)(1)(A), the  
11          Foundation shall give priority to meeting the funding goals  
12          established for the Foundation for Presidential research ini-  
13          tiatives by the Federal Coordinating Council for Science,  
14          Engineering, and Technology, or any successor entity which  
15          assumes its responsibilities.

16          (e) *EDUCATION SUPPORT FOR UNDERREPRESENTED*  
17          *GROUPS.*—In allocating funds authorized under subsections  
18          (b)(1)(B) and (c)(1)(B), the Foundation shall support edu-  
19          cation activities to encourage the participation of women,  
20          minorities who are underrepresented in science, engineer-  
21          ing, and mathematics, and persons with disabilities, and  
22          shall coordinate such activities with related efforts of other  
23          Federal agencies.



1 **SEC. 102. PROPORTIONAL REDUCTION OF RESEARCH AND**  
2 **RELATED ACTIVITIES AMOUNTS.**

3 *If the amount appropriated pursuant to section*  
4 *101(b)(1)(A) or (c)(1)(A) is less than the amount authorized*  
5 *under that subparagraph, the amount authorized for each*  
6 *subcategory under that subparagraph shall be reduced by*  
7 *the same proportion.*

8 **SEC. 103. CONSULTATION AND REPRESENTATION EX-**  
9 **PENSES.**

10 *From appropriations made under authorizations pro-*  
11 *vided in this Act, not more than \$10,000 may be used in*  
12 *each fiscal year for official consultation, representation, or*  
13 *other extraordinary expenses at the discretion of the Direc-*  
14 *tor. The determination of the Director shall be final and*  
15 *conclusive upon the accounting officers of the Government.*

16 **SEC. 104. TRANSFER OF FUNDS.**

17 *For any given fiscal year, the Director may propose*  
18 *transfers to or from any category described in section 101*  
19 *up to a maximum of 10 percent of the amount authorized*  
20 *for that category. An explanation of any such proposed*  
21 *transfer must be transmitted in writing to the Committee*  
22 *on Science, Space, and Technology of the House of Rep-*  
23 *resentatives, and the Committees on Labor and Human Re-*  
24 *sources and Commerce, Science, and Transportation of the*  
25 *Senate. The proposed transfer may be made only after 30*

1 *calendar days have passed after transmission of such writ-*  
2 *ten explanation.*

## 3 ***TITLE II—GENERAL PROVISIONS***

### 4 ***SEC. 201. ANNUAL REPORT.***

5 *Section 3 of the National Science Foundation Act of*  
6 *1950 (42 U.S.C. 1862) is amended by striking subsection*  
7 *(f) and inserting in lieu thereof the following new sub-*  
8 *section:*

9 *“(f) The Foundation shall provide an annual report*  
10 *to the President which shall be submitted by the Director*  
11 *to the Congress at the time of the President’s annual budget*  
12 *submission. The report shall—*

13 *“(1) contain a strategic plan which—*

14 *“(A) defines for a three-year period the*  
15 *overall goals for the Foundation and specific*  
16 *goals for each major activity of the Foundation,*  
17 *including each scientific directorate, the edu-*  
18 *cation directorate, and the polar programs office;*  
19 *and*

20 *“(B) describes how the identified goals re-*  
21 *late to national needs and will exploit new op-*  
22 *portunities in science and technology;*

23 *“(2) identify the criteria and describe the proce-*  
24 *dures which the Foundation will use to assess*

1     *progress toward achieving the goals identified in ac-*  
2     *cordance with paragraph (1);*

3             *“(3) review the activities of the Foundation dur-*  
4     *ing the preceding year which have contributed toward*  
5     *achievement of goals identified in accordance with*  
6     *paragraph (1) and summarize planned activities for*  
7     *the coming three years in the context of the identified*  
8     *goals, with particular emphasis on the Foundation’s*  
9     *planned contributions to major multi-agency research*  
10    *and education initiatives;*

11            *“(4) contain such recommendations as the Foun-*  
12    *dation considers appropriate; and*

13            *“(5) include information on the acquisition and*  
14    *disposition by the Foundation of any patents and*  
15    *patent rights.”.*

16    **SEC. 202. NATIONAL RESEARCH FACILITIES.**

17            (a) *FACILITIES PLAN.*—*The Director shall provide to*  
18    *Congress annually, at the time of the President’s budget*  
19    *submission, a plan for construction of, and repair and up-*  
20    *grades to, national research facilities. The plan shall in-*  
21    *clude estimates of the cost for such construction, repairs,*  
22    *and upgrades, and estimates of the cost for the operation*  
23    *and maintenance of existing and proposed new facilities.*  
24    *For proposed new construction and for major upgrades to*  
25    *existing facilities, the plan shall include funding profiles*

1 *by fiscal year and milestones for major phases of the con-*  
2 *struction. The plan shall include cost estimates in the cat-*  
3 *egories of construction, repair, and upgrades for the year*  
4 *in which the plan is submitted to Congress and for not fewer*  
5 *than the succeeding 4 years.*

6       **(b) LIMITATION ON OBLIGATION OF UNAUTHORIZED**  
7 *APPROPRIATIONS.—No funds appropriated for any project*  
8 *which involves construction of new national research facili-*  
9 *ties or construction necessary for upgrading the capabilities*  
10 *of existing national research facilities shall be obligated un-*  
11 *less the funds are specifically authorized for such purpose*  
12 *by this Act or any other Act which is not an appropriations*  
13 *Act, or unless the total estimated cost to the Foundation*  
14 *of the construction project is less than \$50,000,000. This*  
15 *subsection shall not apply to construction projects approved*  
16 *by the National Science Board prior to June 30, 1993.*

17 **SEC. 203. ELIGIBILITY FOR RESEARCH FACILITY AWARDS.**

18       *Section 203(b) of the Academic Research Facilities*  
19 *Modernization Act of 1988 is amended by striking the final*  
20 *sentence of paragraph (3) and inserting in lieu thereof the*  
21 *following: “The Director shall give priority to institutions*  
22 *or consortia that have not received such funds in the preced-*  
23 *ing 5 years, except that this sentence shall not apply to*  
24 *previous funding received for the same multiyear project.*  
25 *The Director shall exclude from consideration for awards*

1 *to be made under the Program after fiscal year 1995 any*  
 2 *institutions or consortia which received funds, appropriated*  
 3 *for a fiscal year after fiscal year 1994, for the repair, ren-*  
 4 *ovation, construction, or replacement of academic facilities,*  
 5 *from any Federal funding source for projects that were not*  
 6 *subjected to a competitive, merit-based award process.”.*

7 **SEC. 204. ELIGIBILITY FOR PARTICIPATION IN INFORMAL**  
 8 **SCIENCE EDUCATION ACTIVITIES.**

9 *No science-technology center shall be disqualified from*  
 10 *competing for funding support under the informal science*  
 11 *education programs included within the Education and*  
 12 *Human Resources activities of the Foundation on the basis*  
 13 *of the geographic location of the center, the size of the popu-*  
 14 *lation served by the center, or the date on which the center*  
 15 *commences operation.*

16 **SEC. 205. SCIENCE AND ENGINEERING EQUAL OPPORTUNI-**  
 17 **TIES ACT AMENDMENTS.**

18 *The Science and Engineering Equal Opportunities Act*  
 19 *(42 U.S.C. 1885 et seq.) is amended—*

20 *(1) by amending section 32 to read as follows:*

21 *“FINDINGS AND POLICY*

22 *“SEC. 32. The national security and economic com-*  
 23 *petitiveness of the United States demand the full develop-*  
 24 *ment and use of the engineering, mathematical, and sci-*  
 25 *entific talents and skills of all its citizens. Past discrimina-*  
 26 *tion, cultural barriers, unequal educational opportunities,*

1 *and other factors discourage women, minorities, and per-*  
2 *sons with disabilities from studying and working in engi-*  
3 *neering, mathematics, and science. The Congress declares*  
4 *it is the policy of the United States to encourage the partici-*  
5 *pation in engineering, mathematics, and science of members*  
6 *of the groups that are underrepresented.”;*

7 (2) in section 33—

8 (A) by amending the section head to read as  
9 follows:

10 “EQUAL OPPORTUNITIES IN SCIENCE AND ENGINEERING”;

11 (B) in paragraph (1)(A), by striking  
12 “women” and inserting in lieu thereof “women,  
13 minorities who are underrepresented in science,  
14 engineering, and mathematics, and persons with  
15 disabilities (collectively referred to in this section  
16 as ‘members of underrepresented groups’)”;

17 (C) in paragraph (2), by striking “female  
18 students and to increase female student aware-  
19 ness” and inserting in lieu thereof “students who  
20 are members of underrepresented groups and to  
21 make those students aware”;

22 (D) in paragraph (4), by striking “re-  
23 search”;

24 (E) by amending paragraph (5) to read as  
25 follows:

1       “(5) support programs under which scientists  
2       and engineers who are members of underrepresented  
3       groups interact with elementary, secondary, and un-  
4       dergraduate students;”;

5               (F) in paragraph (8), by striking “; to be  
6       known as the National Research Opportunity  
7       Grants, to women scientists and engineers” and  
8       inserting in lieu thereof “to scientists and engi-  
9       neers who are members of underrepresented  
10      groups”;

11              (G) in paragraph (9), by striking “such  
12      women” and inserting in lieu thereof “such per-  
13      sons”;

14              (H) by striking “and” at the end of para-  
15      graph (10);

16              (I) by striking the period at the end of  
17      paragraph (11) and inserting in lieu thereof “;  
18      and”;

19              (J) by adding at the end the following:

20              “(12) support efforts to initiate and expand re-  
21      search opportunities at institutions serving members  
22      of underrepresented groups.

23              “(b) In carrying out activities under this section, the  
24      Foundation may conduct or support activities in which

1 *participation is limited to members of one or more*  
2 *underrepresented groups.”;*

3 *(K) by inserting “(a)” after “SEC. 33.”;*  
4 *and*

5 *(L) except as otherwise provided in this*  
6 *paragraph, by striking “women” each place it*  
7 *appears and inserting in lieu thereof “members*  
8 *of underrepresented groups”;*

9 *(3) by striking section 34;*

10 *(4) in section 36(a), by inserting “, persons with*  
11 *disabilities” after “minorities”;*

12 *(5) in section 36(b), by striking the second sen-*  
13 *tence and inserting in lieu the following: “The Chair-*  
14 *persons of relevant committees or subcommittees of the*  
15 *National Science Board, as designated by the Chair-*  
16 *person of the Board, shall be ex officio members of the*  
17 *Committee.”;*

18 *(6) in section 36 by striking subsections (c) and*  
19 *(d) and redesignating subsections (e) and (f) as sub-*  
20 *sections (d) and (e), respectively;*

21 *(7) in section 36 by inserting after subsection (b)*  
22 *the following new subsection:*

23 *“(c) The Committee shall be responsible for reviewing*  
24 *and evaluating all Foundation matters relating to partici-*  
25 *pation in, opportunities for, and advancement in edu-*



1 cation, training, and research in science and engineering  
 2 of members of underrepresented groups.”; and

3 (8) in section 36(d), as redesignated by para-  
 4 graph (6) of this section, by striking “additional”.

5 **SEC. 206. ROLE OF THE FOUNDATION IN ECONOMIC COM-**  
 6 **PETITIVENESS.**

7 *The Foundation’s efforts to improve the economic com-*  
 8 *petitiveness of the United States shall be in accord with*  
 9 *the functions of the Foundation as specified by section 3*  
 10 *of the National Science Foundation Act of 1950. The pri-*  
 11 *mary mission of the Foundation continues to be the support*  
 12 *of basic scientific research and science education and the*  
 13 *support of research fundamental to the engineering process*  
 14 *and engineering education.*

15 **SEC. 207. ADMINISTRATIVE AMENDMENTS.**

16 (a) NATIONAL SCIENCE FOUNDATION ACT OF 1950  
 17 AMENDMENTS.—*The National Science Foundation Act of*  
 18 *1950 is amended—*

19 (1) in section 4(e) (42 U.S.C. 1863(e)) by strik-  
 20 ing the second and third sentences and inserting in  
 21 lieu thereof the following: “The Board shall adopt  
 22 procedures governing the conduct of its meetings, in-  
 23 cluding definition of a quorum and delivery of notice  
 24 of meetings to members of the Board.”;

1           (2) in section 5(e) (42 U.S.C. 1864(e)) by  
2           amending paragraph (2) to read as follows:

3           “(2) Any delegation of authority or imposition of con-  
4           ditions under paragraph (1) shall be promptly published  
5           in the Federal Register and reported to the Committees on  
6           Labor and Human Resources and Commerce, Science, and  
7           Transportation of the Senate and the Committee on  
8           Science, Space, and Technology of the House of Representa-  
9           tives.”;

10           (3) in section 14 (42 U.S.C. 1873) by striking  
11           subsection (j); and

12           (4) in section 15(a) (42 U.S.C. 1874(a)) by  
13           striking “Atomic Energy Commission” and inserting  
14           in lieu thereof “Secretary of Energy”.

15           (b) NATIONAL SCIENCE FOUNDATION AUTHORIZATION  
16           ACT OF 1988 AMENDMENTS.—Section 117(a)(1)(B)(v) of  
17           the National Science Foundation Authorization Act of 1988  
18           is amended to read as follows:

19           “(v) from schools established outside the several  
20           States and the District of Columbia by any agency of  
21           the Federal Government for dependents of its employ-  
22           ees.”.

23           (c) NATIONAL SCIENCE FOUNDATION AUTHORIZATION  
24           ACT, 1977 AMENDMENT.—Section 8 of the National Science  
25           Foundation Authorization Act, 1977, is repealed.

1 **SEC. 208. RESEARCH INSTRUMENTATION AND FACILITIES.**

2       *The Foundation shall incorporate the guidelines set*  
3 *forth in Important Notice No. 91, dated March 11, 1983*  
4 *(48 Fed. Reg. 15754, April 12, 1983) relating to the use*  
5 *and operation of Foundation-supported research instru-*  
6 *mentation and facilities, in its notice of Grant General*  
7 *Conditions, and shall examine more closely the adherence*  
8 *of grantee organizations to such guidelines.*

9 **SEC. 209. ENVIRONMENTALLY ADVANCED EDUCATION.**

10       (a) *FINDINGS.—The Congress finds the following:*

11               (1) *Improving the general understanding of the*  
12 *relationships between economic and technical activi-*  
13 *ties and the environment, and the opportunities for*  
14 *improvements in such relations, is essential for the ef-*  
15 *fective realization of sustainable economic develop-*  
16 *ment.*

17               (2) *In post-secondary education, with the excep-*  
18 *tion of environmental specialists, environmental con-*  
19 *siderations are typically not integrated into the re-*  
20 *quired coursework for technical, engineering, science,*  
21 *and related professions.*

22               (3) *The integration of environmental consider-*  
23 *ations into all technical, engineering, science, and re-*  
24 *lated professions in a timely fashion is essential to*  
25 *better achieving sustainable economic development.*

1       (b) *IN GENERAL.*—*The Director shall establish a pro-*  
2 *gram to promote the development and distribution of cur-*  
3 *riculum and materials—*

4           (1) *at the primary and secondary levels that will*  
5 *improve the understanding of the relationships be-*  
6 *tween economic and technical activities and the envi-*  
7 *ronment and the opportunities for improving those*  
8 *relationships; and*

9           (2) *at the post-secondary level that will incor-*  
10 *porate the principles and practices of environmental*  
11 *soundness and total cost accounting into all technical,*  
12 *engineering, design, scientific, and related disciplines.*

13       (c) *TECHNICAL PROGRAMS.*—(1) *The Director shall*  
14 *ensure that the special needs of technical programs of insti-*  
15 *tutions described in paragraph (2) are addressed in execut-*  
16 *ing this section, including disseminating information about*  
17 *practices that exemplify environmentally sound practices.*

18           (2)(A) *Except as provided in subparagraph (B), insti-*  
19 *tutions referred to in paragraph (1) are institutions of*  
20 *higher education (as determined under section 1201(a) of*  
21 *the Higher Education Act of 1965 (20 U.S.C. 1141(a))) that*  
22 *offer a 2-year associate-degree program, 2-year certificate*  
23 *program, or other shorter program described in such section*  
24 *1201(a).*

1       (B) Notwithstanding section 1201(a)(4) of the Higher  
2       Education Act of 1965, institutions referred to in para-  
3       graph (1) may include proprietary institutions.

4       (d) COORDINATION.—The Director shall consult with  
5       the heads of other agencies of the Federal Government, State  
6       and local governments, educational institutions, and appro-  
7       priate private sector organizations, including accreditation  
8       boards for engineering, technology, and design educational  
9       institutions in executing this section.

10   **SEC. 210. LIMITATION ON APPROPRIATIONS.**

11       Notwithstanding any other provision of this Act, no  
12       funds are authorized to be appropriated for any fiscal year  
13       after fiscal year 1996 for carrying out the programs and  
14       activities for which funds are authorized by this Act, or the  
15       amendments made by this Act.

16   **SEC. 211. INDIRECT COST REIMBURSEMENT.**

17       (a) LIMITATION.—None of the funds authorized under  
18       section 101(b) may be awarded to any grantee who reported  
19       Federal research grant outlays in excess of \$10,000,000 in  
20       fiscal year 1994, unless such grantee—

21               (1) agrees to notify the Foundation of the  
22               amount of any increased indirect expense; and

23               (2) agrees to the permanent cancellation, in an  
24               amount that equals the increased indirect expense, of  
25               its claims for the portion of unliquidated obligations

1        *from prior year research grants that comprise the in-*  
2        *direct expense allocated to the Foundation.*

3        (b) *DEFINITION.*—*For purposes of this section, the*  
4        *term “increased indirect expense” means the amount by*  
5        *which the grantee’s claim for indirect expense allocated to*  
6        *the Foundation for research grants for fiscal year 1995 ex-*  
7        *ceeds the amount of such claim for fiscal year 1994.*

8        ***SEC. 212. AWARD OF GRANTS AND CONTRACTS: REQUIRE-***  
9        ***MENT OF COMPETITION.***

10        (a) *The Director may not make a grant or award a*  
11        *contract to any institutions or consortia for the perform-*  
12        *ance of research and development, or for the construction*  
13        *of any research or other facility, unless such grant or award*  
14        *is made using a competitive, merit-based evaluation proc-*  
15        *ess.*

16        (b)(1) *A provision of law may not be construed as*  
17        *modifying or superseding the provisions of subsection (a),*  
18        *or as requiring funds to be made available by the Director*  
19        *to a particular institution or consortium by grant or con-*  
20        *tract, unless that provision of law—*

21                (A) *specifically refers to this section;*

22                (B) *specifically states that such provision of law*  
23        *modifies or supersedes the provisions of this section;*  
24        *and*

1           (C) specifically identifies the particular institu-  
 2           tion or consortium involved and states that the grant  
 3           to be made or the contract to be awarded, as the case  
 4           may be, pursuant to such provision of law, is being  
 5           made or awarded in contravention to subsection (a).

6           (2) A grant may not be made, or a contract awarded,  
 7           pursuant to a provision of law that authorizes or requires  
 8           the making of the grant, or the awarding of the contract,  
 9           in a manner that is inconsistent with subsection (a) until—

10           (A) the Director submits to Congress a notice in  
 11           writing of the intent to make the grant or award the  
 12           contract; and

13           (B) a period of 180 days has elapsed after the  
 14           date on which the notice is received by Congress.

## 15   **TITLE III—ACADEMIC RESEARCH** 16   **FACILITIES MODERNIZATION**

### 17   **SEC. 301. FINDINGS.**

18           The Congress finds that—

19           (1) the deficiencies in the condition of buildings  
 20           and equipment used for the conduct of fundamental  
 21           research and related education programs at many  
 22           universities and colleges which are cited in section  
 23           202 of the Academic Research Facilities Moderniza-  
 24           tion Act of 1988 are substantially unchanged;

1           (2) *a national effort, involving the participation*  
2           *of Federal and State governments and the private sec-*  
3           *tor, is required to make progress in improving the*  
4           *state of academic research facilities; and*

5           (3) *because of the scale of the problem, the Fed-*  
6           *eral effort to upgrade academic research facilities*  
7           *must involve a coordinated program among all Fed-*  
8           *eral agencies which sponsor research at academic in-*  
9           *stitutions.*

10 **SEC. 302. FACILITIES MODERNIZATION PLAN.**

11           *The Director of the Office of Science and Technology*  
12           *Policy, through the Federal Coordinating Council for*  
13           *Science, Engineering, and Technology, or any successor en-*  
14           *tity which assumes its responsibilities, shall develop a plan*  
15           *for a multiagency Federal program to provide financial*  
16           *support to institutions of higher education for the repair,*  
17           *renovation, or replacement of obsolete science and engineer-*  
18           *ing facilities primarily devoted to research. The plan*  
19           *shall—*

20           (1) *include participation by all Federal depart-*  
21           *ments and agencies which provide substantial Federal*  
22           *support for research and development activities at in-*  
23           *stitutions of higher education;*

24           (2) *provide estimates of the level of funding re-*  
25           *quired, by department and agency, and period for*



1        *which funding should be provided to relieve substan-*  
2        *tially the backlog of research facilities needs and to*  
3        *ensure that, at the conclusion of the period proposed,*  
4        *the facilities available will be satisfactory to support*  
5        *national research needs;*

6            *(3) take into consideration, for determining the*  
7        *requirements of paragraph (2), ongoing efforts by*  
8        *Federal departments and agencies, State governments,*  
9        *and the private sector to upgrade research facilities;*

10          *(4) be designed to address the needs of the cat-*  
11        *egories of institutions eligible for awards under the*  
12        *Academic Research Facilities Modernization Act of*  
13        *1988;*

14          *(5) detail administrative procedures and guide-*  
15        *lines for the implementation of the modernization*  
16        *program; and*

17          *(6) state procedures and data collection steps*  
18        *which have been implemented to assess the state of*  
19        *academic research facilities and to measure the rate*  
20        *of progress in improving the condition of the facili-*  
21        *ties.*

22        *Within 18 months after the date of enactment of this Act,*  
23        *the Director of the Office of Science and Technology Policy*  
24        *shall transmit to the Congress the plan developed under this*  
25        *section.*

1 **SEC. 303. LIMITATION ON OBLIGATION OF UNAUTHORIZED**  
2 **APPROPRIATIONS.**

3 *No funds appropriated to the Foundation for construc-*  
4 *tion of new facilities or construction necessary for upgrad-*  
5 *ing the capabilities of existing facilities at institutions eli-*  
6 *gible for awards under the Academic Research Facilities*  
7 *Modernization Act of 1988 shall be obligated unless the*  
8 *funds are awarded in accordance with the requirements of*  
9 *the Academic Research Facilities Modernization Act of 1988*  
10 *or are specifically authorized for such purpose by this Act*  
11 *or any other Act which is not an appropriations Act.*

12 **TITLE IV—INTERNATIONAL**  
13 **SCIENTIFIC COOPERATION**

14 **SEC. 401. FINDINGS.**

15 *The Congress finds the following:*

16 *(1) Debt-for-science exchanges can provide an in-*  
17 *novative means to enhance scientific cooperation with*  
18 *countries whose external debt burden prevents them*  
19 *from allocating sufficient resources to their scientific*  
20 *and technological infrastructures.*

21 *(2) Debt-for-science exchanges have been dem-*  
22 *onstrated to improve the state of scientific research*  
23 *and education in several countries, including Bolivia,*  
24 *Costa Rica, Ecuador, Chile, and Mexico.*

1 **SEC. 402. DEBT-FOR-SCIENCE EXCHANGES.**

2       (a) *DEBT-FOR-SCIENCE EXCHANGE GRANTS.*—The  
3 *Director is authorized to make grants to organizations*  
4 *within the United States, including colleges and univer-*  
5 *sities, for the purpose of debt-for-science exchanges. Before*  
6 *making any grant under this section, the Director shall as-*  
7 *certain that—*

8           (1) *funds resulting from the debt-for-science ex-*  
9 *change will be expended only for purposes of inter-*  
10 *national cooperative scientific research and develop-*  
11 *ment projects;*

12          (2) *the debt-for-science exchange will make funds*  
13 *available for such projects which otherwise would not*  
14 *be available;*

15          (3) *the amount of local currency provided as a*  
16 *result of the debt-for-science exchange will be substan-*  
17 *tially greater than the United States dollar purchase*  
18 *price of the debt;*

19          (4) *the grantee certifies that the debtor govern-*  
20 *ment has accepted the terms of the exchange and that*  
21 *an agreement has been reached to cancel the commer-*  
22 *cial debt; and*

23          (5) *Federal grants made under this section will*  
24 *be equally matched by non-Federal contributions to*  
25 *purchase debt.*

1       (b) *INVESTMENT OF GOVERNMENT ASSISTANCE.*—  
2   Grantees or subgrantees of funds provided under this section  
3   may retain, without deposit in the Treasury of the United  
4   States and without further appropriation by Congress, in-  
5   terest earned on the proceeds of any resulting debt-for-  
6   science exchange pending disbursements of such proceeds  
7   and interest for approved program purposes, which may in-  
8   clude the establishment of an endowment, the income of  
9   which is used for such purposes.

10       (c) *COORDINATION.*—In carrying out subsection (a)  
11   the Director shall coordinate with Federal agencies, such  
12   as the Agency for International Development, that have ex-  
13   pertise in debt exchanges.

14   **SEC. 403. NATIONAL SCIENCE FOUNDATION PARTICIPA-**  
15                   **TION IN BINATIONAL AND MULTINATIONAL**  
16                   **ENDOWED SCIENCE FOUNDATIONS.**

17       The Director, in consultation with appropriate offi-  
18   cials of the United States and foreign countries, may en-  
19   courage and facilitate the establishment of binational and  
20   multinational endowed science foundations, and may par-  
21   ticipate in the operation and governance of such founda-  
22   tions, including serving as a member of or designating  
23   members to the Boards of Governors, if such foundations—

1           (1) have Boards of Governors whose members are  
2       chosen to represent participating countries and pos-  
3       sess expertise in international scientific cooperation;

4           (2) have a structure and operational characteris-  
5       tics determined exclusively by their Boards of Gov-  
6       ernors, consistent with paragraph (3); and

7           (3) are established and governed in accordance  
8       with charters which include provisions—

9           (A) to ensure that the funding of the endow-  
10       ment is shared equitably among the participat-  
11       ing nations, appropriate to their economic re-  
12       sources;

13          (B) to protect the endowment's principal  
14       from loss of value due to inflation;

15          (C) to define the range of scientific and edu-  
16       cational activities to be funded;

17          (D) to define criteria for application, merit  
18       review, and awarding of funds which encompass,  
19       at a minimum, consideration of scientific merit,  
20       strength of collaborative arrangements, and po-  
21       tential benefit to participants;

22          (E) to limit administrative costs to those  
23       that are prudent and necessary; and

24          (F) to engage an independent auditor to  
25       perform an annual organization-wide audit of

1        *such foundations, in accordance with generally*  
2        *accepted auditing standards, and to make the re-*  
3        *sults of the audit immediately available to the*  
4        *Director and the Board of Governors.*

5    **SEC. 404. REPORT.**

6        *Within one year after the date of enactment of this*  
7    *Act, the Director shall submit to the Congress a strategic*  
8    *plan for international scientific cooperation activities un-*  
9    *dertaken by the Foundation which—*

10        *(1) describes and evaluates all activities involv-*  
11        *ing international scientific cooperation currently car-*  
12        *ried out by the Foundation;*

13        *(2) describes how these activities relate to ongo-*  
14        *ing and prospective Foundation research and edu-*  
15        *cational activities;*

16        *(3) details research activities and geographic*  
17        *areas where international scientific cooperation has*  
18        *been most effective and where it has been least effec-*  
19        *tive;*

20        *(4) describes plans for future cooperative inter-*  
21        *national scientific projects; and*

22        *(5) assesses the research activities and geographic*  
23        *areas where future international scientific cooperation*  
24        *would be most effective.*

1       ***TITLE V—UNDERGRADUATE***  
2                   ***EDUCATION***

3   ***SEC. 501. REQUIREMENT FOR FUNDING.***

4       *Each educational institution that receives a research*  
5 *grant from the Foundation in fiscal year 1995 shall, as a*  
6 *condition of receiving such grant, provide to the Foundation*  
7 *the following information on its undergraduate mathe-*  
8 *matics, science, and engineering activities:*

9           (1) *A description of teacher training programs*  
10       *mandated by the institution for teaching assistants,*  
11       *including the number of training hours required.*

12           (2) *The institution's policy regarding the relative*  
13       *importance of teaching and research duties in deci-*  
14       *sions on promotion, tenure, and salary for faculty,*  
15       *including any written policy with specific criteria.*

16           (3) *Any policy allowing faculty to replace uni-*  
17       *versity salary with funds from outside sources, along*  
18       *with any policy allowing faculty to replace all or*  
19       *part of the teaching load with increased research.*

20           (4) *The number of faculty released from some or*  
21       *all of their teaching responsibilities pursuant to a*  
22       *policy described in paragraph (3), with the number*  
23       *replacing all or some of their salary with Federal*  
24       *funds reported separately.*

1           (5) *The number and percentage of faculty, not*  
2           *including those on regular sabbatical leave, teaching*  
3           *no undergraduate courses.*

4           (6) *The number and percentage of faculty sup-*  
5           *ported by active Federal research grants teaching*  
6           *freshman or sophomore lecture courses.*

7           (7) *The number and percentage of lecture sources*  
8           *taught by individuals other than faculty.*

9           (8) *The number of students per course in each*  
10          *introductory course.*

11 *Information shall be provided for the most recent academic*  
12 *year for which it is available. For purposes of this section,*  
13 *the term “educational institution” means an institution of*  
14 *higher education that is ranked among the top 100 of the*  
15 *institutions receiving Federal research and development*  
16 *funding, as documented in the latest annual report of the*  
17 *Foundation entitled “Federal Support to Universities, Col-*  
18 *leges, and Selected Non-Profit Institutions”. The term “fac-*  
19 *ulty” means tenured or tenure-track employees not serving*  
20 *in full-time administrative positions. The Foundation shall*  
21 *compile this information and submit it to the Congress no*  
22 *later than December 31, 1995.*

23 **SEC. 502. RECOMMENDATIONS.**

24          *The Director shall transmit to the Congress, at the*  
25 *time of the President’s budget request for fiscal year 1997,*



1 *recommendations as to how Foundation research funds*  
2 *could be used to increase the focus on undergraduate edu-*  
3 *cation at institutions of higher education.*

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